DATE: June 28, 2004

FROM: BRIAN COSTLOW, ACTING DIRECTOR
OFFICE OF MANAGEMENT COMMUNICATIONS, ME-43

TO: DIRECTIVES POINTS OF CONTACT

SUBJECT: DRAFT DOE G 450.1-10, *Senior Managers' Implementation Guide for Use with DOE O 450.1, Environmental Protection Program*

This is to notify you that the subject draft Guide has been posted in the "Draft" section of the DOE Directives portal for simultaneous use and coordination. This Guide provides a summary description of environmental management systems (EMSs) for DOE senior managers, including their responsibilities to implement EMSs as part of their Integrated Safety Management Systems (ISMSs) and the benefits of implementing an EMS as part of an ISMS.

Guides are not requirements documents and are not to be construed as requirements in any audit or appraisal for compliance with the parent Policy, Order, Notice, or Manual. Since Guides do not contain requirements, their content is at the discretion of the author. Therefore, comments on Guides should not be designated "major" or "suggested"; they should simply be labeled as "comments."

Guides are reviewed through the Directives System, but are not coordinated using RevCom. Instead they are posted on the directives portal at:
http://www.directives.doe.gov/directives/draft.html

Comments on the Guide are due August 30, 2004.

The following procedures should be followed for the submission of comments:

Directives Points of Contact at Headquarters Elements: Submit one set of consolidated comments to the originator of the Guide: Larry Stirling, EH-412, Room 3G-092, Forrestal, facsimile: 202-586-0955; or INTERNET address: John.Stirling@hq.doe.gov.

Send an additional copy of comments to LaVerne Fuller, ME-43, Room 4B-172, Forrestal, facsimile: 202-586-1972, or to: laverne.fuller@hq.doe.gov.

Directives Points of Contact at Field Elements: will submit consolidated comments to their appropriate Lead Program Secretarial Office. If appropriate, the package submitted by Field Elements may contain comments provided by contractors.

Contractors will submit comments directly to their appropriate Field Elements.

Questions concerning the content of the Guide should be directed to Larry Stirling at (202) 586-2417. Questions on the directives system should be directed to LaVerne Fuller at (202) 586-1996.

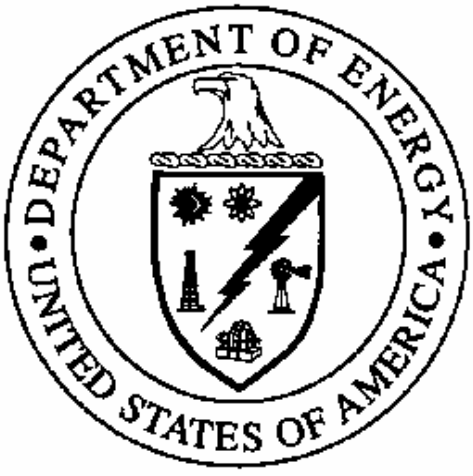
Attachment

NOT MEASUREMENT SENSITIVE

DOE G 450.1-10
DRAFT XX-XX-04

Senior Managers' Implementation Guide for Use with DOE O 450.1, *Environmental Protection Program*

[This Guide describes suggested nonmandatory approaches for meeting requirements. Guides are not requirements documents and are not to be construed as requirements in any audit or appraisal for compliance with the parent Policy, Order, Notice, or Manual.]



U.S. Department of Energy
Washington, D.C. 20585

AVAILABLE AT:
http://www.directives.doe.gov

INITIATED BY:
Office of Environment, Safety and Health

FOREWORD

This Guide is one of a series issued to provide suggested approaches for meeting the requirements of DOE O 450.1, *Environmental Protection Program*, dated 1-15-03, which requires Department of Energy (DOE) organizations to establish environmental management systems (EMSs) that are part of DOE's Integrated Safety Management System (ISMS). This Guide provides a summary description of EMSs for DOE senior managers, including their responsibilities to implement EMSs as part of their ISMSs and the benefits of implementing an EMS as part of an ISMS.

This Guide is approved for use by the DOE Office of Environment, Safety and Health and is available for use by all DOE elements, including the National Nuclear Security Administration, and their contractors. Suggestions for corrections or improvements to this Guide should be addressed to—

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DOE Guides are part of the DOE Directives System and are issued to provide supplemental information regarding the Department's expectations of its requirements as contained in rules, Orders, Notices, and regulatory standards. Guides also provide acceptable methods for implementing these requirements; however, Guides do not establish or invoke any new requirements nor are they substitutes for requirements. Guides do not replace Technical Standards, which are used to describe established practices and procedures for implementing requirements.

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1. INTRODUCTION

1.1 PURPOSE

This document provides discretionary guidance for implementing the requirements of DOE O 450.1, *Environmental Protection Program,* dated 1-15-03. DOE O 450.1 requires implementation of sound stewardship practices that are protective of air, water, land, and cultural and ecological resources impacted by Department of Energy (DOE) operations and by which DOE meets or exceeds compliance with applicable environmental, public health, and resource protection laws, regulations, and DOE requirements in a cost-effective way. This objective is to be accomplished by implementing environmental management systems (EMSs) at DOE facilities as part of existing Integrated Safety Management Systems (ISMSs) established pursuant to DOE P 450.4, *Safety Management System Policy,* dated 10-15-96. This Guide provides suggested approaches for meeting this objective.

1.2 APPLICABILITY

This Guide is for use by all DOE elements including the National Nuclear Security Administration (NNSA), and DOE/NNSA contractors required to implement DOE O 450.1.

1.3 USE OF GUIDANCE

DOE Guides are not requirements documents and may not be considered as requirements in any audit or assessment of compliance with the associated Policy, Order, Notice or Manual.

DOE O 450.1 requires DOE elements to establish EMSs that are integrated into DOE site ISMSs. The integration of an EMS into an ISMS (hereinafter referred to as ISMS/EMS) provides a unified strategy for the management of resources; the control and attenuation of risks; and the establishment and achievement of the organization's environment, safety, and health goals.

The guidance contained in this document provides senior managers[1] with an overview of DOE O 450.1 roles and responsibilities to ensure successful implementation of ISMS/EMS and the benefits of implementing ISMS/EMS.

2. ENVIRONMENTAL MANAGEMENT SYSTEMS

An EMS is a systematic and structured approach for addressing the environmental consequences of an organization's activities, products, and services. Executive Order (E.O.) 13148, *Greening the Government Through Leadership in Environmental Management*, requires Federal agencies to implement EMSs at all appropriate facilities by December 31, 2005. The Department's progress in implementing the requirements of E.O. 13148 is reported to the White House Office of the Federal Environmental Executive (OFEE) on an annual basis by the Assistant Secretary of

[1] The level of management that has the authority to make decisions for the site or facility.

Environment, Safety and Health, who also serves as the Agency Environmental Executive for the Department.

The OFFE prepares a scorecard each year to measure progress toward the goal of implementing EMS. The OFEE has identified several key metrics for Federal agencies to report. DOE has adopted these metrics to support DOE's reporting requirements. This information will also assist DOE leadership in assessing how the Department is implementing their responsibilities to ensure that sites under their purview have implemented EMS by December 31, 2005.

In furtherance of the goals of E.O. 13148, DOE issued DOE O 450.1 in January 2003. This Order requires DOE elements to integrate EMSs into site ISMSs (ISMS/EMS).

3. THE BENEFITS OF INTEGRATING AN ENVIRONMENTAL MANAGEMENT SYSTEM AS PART OF AN INTEGRATED SAFETY MANAGEMENT SYSTEM

The benefits to implementing an EMS as part of an ISMS are as follows.

- Achieving mission goals, reducing costs, and improving business practices.
- Improving environmental compliance performance.
- Addressing stewardship and legacy management issues systematically.
- Improving credibility with regulators and the local community.

Integrating an EMS as part of an existing ISMS can benefit an organization by considering environment (with a capital "E") as part of the strategic planning process from the very beginning. This helps build "E" into the way organizations do business and is part of the critical path to environmental management success.

3.1 ACHIEVING MISSION GOALS, REDUCING COSTS, AND IMPROVING BUSINESS PRACTICES

Implementing ISMS/EMS will enable sites to cost-effectively protect the environment while executing their primary mission goals. This systematic approach can reveal many opportunities for improving efficiency in reducing waste, preventing pollution, conserving resources, and saving money. The inherent flexibility provided by management systems allows organizations to implement ISMS/EMS at facilities and organizations of varying sizes, complexities, and missions (e.g., offices, laboratories, facilities, programs). Moreover, ISMS/EMS provides consistency and reliability in the management, assessment, and continuous improvement of environmental programs and controls.

An ISMS/EMS approach can improve business practices by involving top management. Increasing employee awareness and participation shifts the culture of the organization toward the establishment of an environmental ethic that strives toward continual improvement of

environmental performance by promoting the efficient and compliant accomplishment of mission goals.

3.2 IMPROVING ENVIRONMENTAL PERFORMANCE

Effective implementation of ISMS/EMS involves the entire staff, especially line management, and not just the environmental staff. Use of EMSs will allow line managers to predict potential environmental problems early in their planning processes, design activities to minimize or avoid them, continually check performance, and make improvements where appropriate. When management and staff review the processes associated with the site/facility's activities, products, and services, redundancies, wasted effort, and coordination problems that lead to inefficiencies can often be identified.

3.3 ADDRESSING STEWARDSHIP AND LEGACY MANAGEMENT CHALLENGES SYSTEMATICALLY

DOE sites are and will be faced with many stewardship and legacy management challenges. Many sites will close within the next 10 years, making a systematic approach to reconciling mission goals with environmental requirements and stakeholder concerns not only necessary, but the most efficient, cost-effective alternative. By implementing ISMS/EMS, sites can identify and address concerns and proactively ensure effective environmental stewardship.

3.4 IMPROVING CREDIBILITY WITH REGULATORS AND LOCAL COMMUNITIES

Local communities recognize and appreciate a site/facility's open commitment to improved environmental performance. Regulatory agencies prefer management systems for similar reasons. A properly functioning ISMS/EMS makes the regulator's job easier. Key environmental information that is well organized and easy to obtain helps lessen the chance of a noncompliant situation.

4. INTEGRATION OF ENVIRONMENTAL MANAGEMENT SYSTEMS INTO INTEGRATED SAFETY MANAGEMENT SYSTEMS

DOE O 450.1 requires DOE elements to ensure that site ISMSs include an EMS. In those instances where ISMS is not applicable, DOE elements must ensure the implementation of an EMS. By definition, an EMS is that part of the site ISMS which addresses the environmental consequences of an organization's products, services, and activities. ISMS/EMS provides a formal process for developing, communicating, and acting on environmental information. Its end products are environmentally aware and responsible personnel, better management, informed decision making, and improved compliance with environmental requirements.

Several recognized EMS frameworks exist. ISO 14001 is the framework upon which organizations most frequently base their EMSs; however, DOE O 450.1 does **not** require DOE organizations to use this framework.

The integration of an EMS into an ISMS provides a unified strategy for the management of resources; the control and attenuation of environmental risks; and the establishment and achievement of the organization's environment, safety, and health goals. ISMS/EMS should be viewed as an ISMS enhancement that adds those EMS elements not previously included in the ISMS. It is recognized that many sites have already implemented ISMSs and should therefore have most, if not all, of the elements of an EMS already in place.

Existing environmental programs provide an excellent starting point for implementing ISMS/EMS because many of the required EMS elements are probably already in place. For example, existing site environmental information contained in annual site environmental reports, environmental impact statements, permit applications, monitoring reports, etc., can provide a solid foundation for meeting ISMS/EMS data needs. ISMS/EMS provides a framework for linking these elements into an effective management system that directly supports the site/facility major missions. ISMS/EMS also establishes a system for continual environmental performance improvements that will eventually become the accepted way of doing business.

Guidance documents DOE G 450.1-1, *Implementation Guide for Use with DOE O 450.1, Environmental Protection Program*, dated 2-18-04, and draft DOE G 450.1-2, *Implementation Guide for Integrating Environmental Management Systems into Integrated Safety Management Systems,* provide information on the acceptable methods for meeting the requirements of DOE O 450.1. DOE G 450.1-1 provides an overview of the EMS process, while DOE G 450.1-2 provides detailed guidance relating to integrating EMSs into a site's ISMS. Additional documents that provide guidance on meeting the requirements of DOE O 450.1 can be found at http://www.eh.doe.gov/oepa.

5. IMPLEMENTATION OF ISMS/EMS AT CLOSURE SITES

Closure sites (i.e., sites that have ceased operations or have identified near-term closure activities and schedules) are required to implement ISMS/EMS. It is important to note that a site conducting closure activities may have most of the elements of ISMS/EMS completed. Sites in the closure phase should consider how well environmental concerns were integrated in their existing ISMS and use a graded approach to supplement their existing ISMS to meet the requirements of DOE O 450.1 and ensure an environmentally sound closure process.

Most closure sites are conducting cleanup and closure activities pursuant to the regulatory requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or other legal agreements with the Environmental Protection Agency (EPA) and/or State environmental agencies. This information can provide the foundation for the key elements of ISMS/EMS. The documentation provided by an EMS can also be used to facilitate the transfer of a closure site from one entity to another, including issues regarding post-closure care.

6. SENIOR MANAGER ROLES AND RESPONSIBILITIES IN SUCCESSFUL ISMS/EMS IMPLEMENTATION

Specific responsibilities for senior managers[2] are found in DOE O 450.1, paragraph 5c. The following are among the key responsibilities.

- Ensure that by December 31, 2005, all sites under their purview have implemented the management system requirement of DOE O 450.1.
- Request through the annual Departmental budgetary process, the funding and resources needed for implementing the requirements of DOE O 450.1.

DOE operations/field/site office manager responsibilities are found in DOE O 450.1, paragraph 5d. The following are among the key responsibilities.

- Report by December 31, 2005, to the cognizant Secretarial Officer the status regarding whether the EMS requirements of DOE O 450.1 have been integrated into ISMSs by site contractors.
- Ensure contractors with approved ISMS descriptions update the ISMS descriptions, as necessary, to include the EMS requirements of DOE O 450.1.

Detailed requirements may be found in their entirety in paragraph 5 of DOE O 450.1.

The senior manager's role in successful ISMS/EMS implementation includes the following.

- Support the ISMS/EMS.
- Provide Oversight and Guidance.
- Promote the Use of EMS Tools and Training.
- Engage the Local Community.

6.1 SUPPORT THE ISMS/EMS

For the successful implementation of ISMS/EMS, the entire site will need to be involved and understand that senior management fully supports the process. Showing clear management commitment to implementing ISMS/EMS is essential for success. The senior manager sets the tone and priority for implementing ISMS/EMS. One of the many ways this can be done is through the site's environmental policy.

A strong, clear environmental policy statement emphasizing principles such as regulatory compliance, pollution prevention, and continual improvement is the first step to ensuring all employees know what is expected of them as they do their jobs. Although organizations usually measure ISMS/EMS performance by assessing progress toward reducing identified

[2] Program Secretarial Officers, the Administrator of the National Nuclear Security Administration, Administrators for the power administrations.

environmental risks, it is the environmental policy that typically provides the ultimate benchmark of the system's performance.

Everyone at the site/facility should be aware of the policy and understand the senior manager's intent. Successful ISMS/EMS implementation depends on the senior manager's ability to communicate the system's benefits and to maintain focus during the multiyear implementation process.

Commitment of resources, including personnel and funding, not only shows support, but is essential to ensure successful ISMS/EMS implementation.

The senior manager must also promote buy-in and support from other leaders and contractors in order to implement an effective ISMS/EMS.

6.2 PROVIDE OVERSIGHT AND GUIDANCE

Senior management oversight, guidance, and encouragement are essential for maintaining momentum over the course of the implementation process. When the senior manager maintains interest, members of the staff also stay focused. The senior manager must be personally involved in ISMS/EMS management reviews and issue specific directives as needed.

6.3 PROMOTE THE USE OF EMS TOOLS AND TRAINING

Senior management emphasis on continual improvement through the use of guidance documents and encouragement of training are key to successful implementation of ISMS/EMS. DOE-specific guidance, training, and implementation tools are available to DOE sites/facilities at http://www.eh.doe.gov/oepa/. EPA also has EMS information resources available to all Federal agencies at http://www.epa.gov/ems/, and OFEE has EMS templates and training modules available at http://www.ofee.gov/ems/resources/templates.html.

6.4 ENGAGE THE LOCAL COMMUNITY

Senior managers frequently interact with citizen advisory boards, local community leaders, and other stakeholders, and implementation of the ISMS/EMS initiative can provide a positive message regarding a site's commitment to environmental protection and stewardship. Communicating the ISMS/EMS process to the local community will help to enhance the site's creditability and promote the visibility of this management approach.

7. CONCLUSION

ISMS/EMS shifts the environmental program focus to a management system that identifies potential environmental problems early in the planning process so they can be avoided and/or mitigated. Managers can embed this proactive approach in everyday business processes and mission activities. ISMS/EMS is a valuable tool for accomplishing mission-related work while maintaining compliance, achieving beyond-compliance results, and minimizing environmental

impacts in regulated and nonregulated areas. Effective ISMS/EMSs will serve to increase environmental awareness and life-cycle accountability for everyone working at a DOE site and to integrate these values into all aspects of the Department's work.